# 2004 Report to the Colorado Legislature











# Colorado Preschool Program

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# Colorado Preschool Program 2004 Legislative Report

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#### **Colorado Department of Education Organizational Commitment:**

The Colorado Department of Education dedicates itself to increasing achievement levels for all students through comprehensive programs of education reform involving three interlocking elements: 1) <u>High Standards</u> for what students must know and be able to do; 2) Challenging <u>Assessments</u> that honestly measure whether or not students meet standards and tell citizens the truth about how well our schools serve children; and 3) <u>Rigorous Accountability Measures</u> that tie the accreditation of school districts to high student achievement.



I sometimes wonder...

"if I will learn about books."

When I grow up I want to ...

"be a police officer."

One more thing you should know about me is ...

"I am beautiful."

#### Introduction

The Colorado Preschool Program (CPP) was enacted by the General Assembly as part of the Public School Finance Act of 1988. The program serves children who lack overall learning readiness due to individual and family risk factors. These risk factors increase the likelihood that children will drop out of school at an early age, will need special services in the later years, will fail to achieve their full potential, and will become involved in criminal activities.

- In the 2003-04 school year, CPP is authorized to serve 9.050 children.
- I,500 preschool slots and 500 full-kindergarten slots were cut from the Colorado Preschool Program in the 2003 Legislative Session. These slots are to be restored in the 2005-06 school year.
- CPP serves approximately 12.8% of the four-year-olds in Colorado.

- One thousand of the available 9,050 CPP slots must be used to provide full day kindergarten services.
- In the 2003 school year, III school districts identified
   5,635 children that were CPP eligible, but these school districts were unable to serve the children because of a lack of CPP slots.
- 154 out of 178 (86%) of the school districts in Colorado now participate in CPP. Participation on the part of school districts is voluntary.
- In 2003 the Colorado Preschool Program documented a match that enabled Colorado to "draw down" an additional \$8.6 million in Federal revenue. These additional Federal funds supported TANF and the Child Care Block Grant.

Thank you for allowing Peetz this opportunity to participate in the Colorado Preschool program. Having the CPP funding in our school has made the difference of having a preschool in our community or not having one at all.

**Peetz CPP Coordinator** 

Without the preschool, our 3— to 5-year olds may well be resigned to life in front of a television. Superintendent of Otis Schools

The children who are at-risk in my class-room are able to get an early start to build the foundation they need to develop their pre-readiness skills for the important years in elementary school. I strongly believe that early intervention does make a difference, particularly in at-risk children who are rarely exposed to the joy of books, stories and other early learning opportunities.

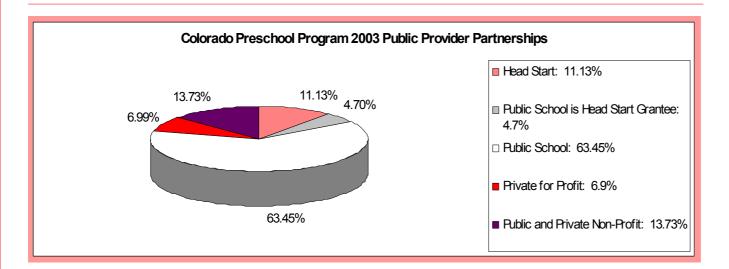
Adams 14 Preschool Teacher

The early exposure to literacy, stories, counting and other children makes a big difference in kindergarten. It is especially important for those children who also need to learn the English language along with all the skills of school.

Adams-Arapahoe 28J Kindergarten Teacher

#### **Colorado Preschool Program Collaborations**

The CPP legislation gives communities the freedom to decide locally who is best qualified to deliver CPP services. The intent of the law is to provide children and their families with the highest quality services available. As a result, Colorado Preschool Program children are served throughout the state in Head Start programs, private for-profit programs, non-profit programs and programs within public schools.



Whether a school district chooses to collaborate or not depends on the resources available within the community. A major responsibility of the CPP district council is to develop a process that allows community early childhood programs to apply for the opportunity to deliver CPP services. One step in this process is to develop and issue a Request for Proposal (RFP) to the community. District councils are required to send out RFP's at least once every five years to assess whether alternative community providers are available.

Type of Delivery System	Number of School Districts	Percent- age	
CPP district councils with no other licensed preschool or child care center in the community to contract with	49	32%	
CPP district councils that contract out all allocated CPP slots	37	24%	
CPP district councils that choose to provide services in both community and public school settings	42	27%	
CPP district councils with at least one other licensed center or preschool in the community but no slots are contracted out. (Provider(s) may be unable or unwilling to contract with CPP)	26	17%	
Total Number of School Districts Participating in CPP	154	100%	

In kindergarten I
would like to learn ...
"to count."

I sometimes wonder

... "about wasps nests"

One more thing you should know about me is ...

"I have a heart"





In kindergarten I
would like to learn ...
"big kid homework."

When I grow up I want to ...
"go see the

kangaroos"

One more thing you should know about me is ...

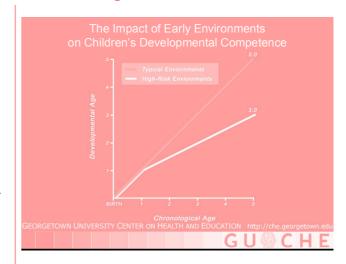
"I like school."

#### Cost -Benefit Analysis of Early Childhood Education Programs

School achievement is at the forefront of Colorado's agenda, and school readiness plays a key role in helping children truly succeed in school. Large numbers of children start kindergarten with major delays in language and basic academic skills. Waiting until these children "fail" and then providing remedial or compensatory programs, or even requiring them to repeat grades, is not cost effective.

Recent advances in the fields of neurobiology and early childhood education affirm that the early years are ones of rapid growth and development. Children who enter school behind their peers are constantly challenged to catch up, and even with subsequent extra help, will continue to lag their entire school career. However, when given the right types and amounts of language, cognitive and social-emotional experiences, children are better prepared to receive and benefit from instruction in elementary school. These early experiences not only pay off in classroom performance, but also in actual dollars.

Following is a summary of three key longitudinal studies that find increased achievement test scores, decreased rates of being held back in school, and decreased placement in special education among low-income children who participated in high-quality early childhood programs. This scientific evidence also finds increased high school graduation and decreased crime and delinquency rates into young adulthood. Included in this table is an analysis of how these benefits translate into actual dollar savings. On the following pages of this report is information on how the Colorado Preschool Program is documenting similar trends and benefits.



There is an undeniable cumulative toll of limited learning opportunities and low expectations for children from "high risk" home environments. The comparative course of development for children who do and those who do not receive positive learning experiences in the first 5 years of life is shown here. This means that children without a solid pre-K foundation (illustrated by the white line) are likely to start kindergarten approximately 2 (or more) years behind their age mates who are in typical environments. Delays of this magnitude constitute a serious challenge for classroom teachers and school districts, as well as to the children themselves.

Source: Ramey, C. "Preparing America's Children for Success in School." Paper prepared for Invited Address White House Early Childhood Summit on Ready to Read, Ready to Learn. Denver, CO. May 21, 2003

Research on the Cost-Benefits of Early Childhood Programs



In kindergarten I
would like to learn ...
"to sing."

When I grow up I want to ...

"be a policeman."

One more thing you should know about me is ...

"I like to read."

#### **CPP Effectiveness Data: Reduced Special Education Placements**

While the Colorado Preschool Program has not had the resources to participate in a longitudinal costbenefit analysis, similar educational results as those identified in the national research are also being reported by school districts for participants in the Colorado Preschool Program. What are the estimated cost savings?

Three years after the Colorado Preschool Program (CPP) was first implemented, CDE obtained funding from the U.S. Department of Education to study the effectiveness of CPP. At that time it was determined

that 42.5% of the children participating in CPP were at-risk of placement into special education as evidenced by their scores on the "Early Screening Inventory".

After one year of participation in CPP, those children were tested again and only 11.1% of them continued to be at risk of placement into special education. The percentage drop from 42.5% to 11.1% in possible placement in special education has significant cost benefits., as shown in the table below.

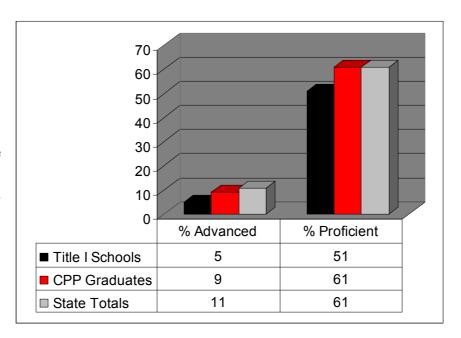
Estimated Savings in Reduction of Special Education Placements	Cost savings for 1 year	Cost Savings Over 3 years *	Cost Savings Over 5 years *	Cost Savings Over 8 years *		
Savings in reduction of special education placement by 1 child (1 FTE)*	\$6,369	\$19,107	\$31,845	\$50,952		
Conservative Estimate: Reduction of special education placement by 10% of CPP population or 805 children	\$5,127,045	\$15,381,135	\$25,635,225	\$41,016,360		
<b>Moderate Estimate</b> : Reduction of special education placement by 20% of CPP population or 1,610 children	\$10,254,090	\$30,762,270	\$51,270,450	\$82,032,720		
<b>High Estimate</b> : Reduction of special education placement by 30% of CPP population or 2,415 children	\$15,381,135	\$46,143,405	\$76,905,675	\$123,049,080		
* Yearly costs are not adjusted for inflation						
Source: Estimated average yearly cost per special education student in Colorado for FY 2001-02 per Charm Paulmeno, Director of Grants Fiscal Management Unit						

#### **CPP Effectiveness Data: Higher Scores on Achievement Tests**

CPP is getting similar results to the national research on the effectiveness of early childhood programs. Analysis of the 2002 Third Grade Reading CSAP Scores indicate that when at-risk children in Colorado are given the opportunity to participate in a high quality early childhood education program there are strong educational benefits. At the right is a comparison of third grade reading CSAP scores of CPP graduates, children participating in Title I programs and the average scores of children across Colorado.

Seventy percent of CPP graduates scored proficient or above on the third grade CSAP, compared to 56% of children participating in Title I programs.

#### Comparison of 2002 Third Grade Reading CSAP Scores



#### Statewide:

70% of school districts reported that CPP graduates scored better on the third grade CSAP than their district wide averages. This is particularly important when one considers that the children eligible to participate in CPP must be identified to be "at-risk." CPP is an important tool in closing the achievement gap.

# Closing the Gap in A New CPP School District: Rocky Ford

"Last year, before starting the Colorado preschool program, 63% of our total kids passed the kindergarten screening test. This year of the 29 students who were able to participate in the Colorado Preschool Program, 28 of them passed the kindergarten screening.

Of the 15 students who represent the top 25% of the screening scores - 12 were from our preschool and all 29 students were in the top quartile of students tested on DIBELS—our Reading First assessment.

All four of our kindergarten teachers report "high" marks for our preschool students' behavior and listening skills."

I already know a lot about...

"the alphabet and how to write letters."

I sometimes wonder...

"how I can write better."

One more thing you should know about me is ...

"I like to read. books."





### In kindergarten I would like to learn ...

"how to make letters."

## I already know a lot about ...

"the "e" and "m" and "f". "

#### When I grow up I want

to ...

"be an astronaut."

#### More Evidence on the Effectiveness of the Colorado Preschool Program

School districts across the state are reporting students who are funded by the Colorado Preschool Program scored as well or better than peers on comparable measures of student performance. Following are a few examples:

#### **Pueblo #60 School District:**

Children who attended a Pueblo District 60 preschool demonstrated a 7% increase in proficiency over those who did not attend a District 60 preschool.

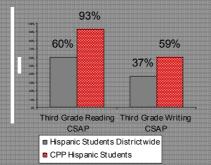
#### **Durango School District::**

When the pre- and post- evaluations were done on the DECA (Devereux Early Childhood Assessment – a tool that addresses social and emotional development) the number of children who had behavior concerns were reduced by half and 51% of the children had statistically significant increases in their protective factors of initiative, self-control, and/or attachment.

#### **Springfield School District**:

The most impressive data we have compiled this year found that students who were funded by CPP in this district as preschoolers who have taken the reading CSAP were 29% more likely to score Advanced or Proficient than their classmates who were not funded by CPP This group included students now in  $4^{th}$ ,  $5^{th}$ ,  $6^{th}$ , and  $7^{th}$  grades.

# Mesa County Valley 51 School District Third Grade CSAP Results for Hispanic Students



#### **Mapleton Public Schools:**

Elementary principals and kindergarten teachers across the district comment on how they can tell when a kindergarten student has attended Mapleton Preschool because they are able to attend and focus, have successful play skills, are advanced on literacy and math activities and have appropriate problem solving skills.

#### Denver Public Schools:

Fifty-five percent of the students whose early childhood experiences were supported by CPP dollars scored at the proficient or above level on the third grade CSAP. The district wide average was 50%.

#### Monte Vista School District:

"When assessed with the Preschool Language Survey, 78% of our CPP students made over the expected year's growth as measured by chronological age expectations, with the average growth per child being I year and 4 months. 5 children made over two years growth."

The effectiveness of CPP continues to be documented in the third grade proficiencies reported for the Colorado Basic Literacy Act in Monte Vista (table below).

	CPP Students' Profi- ciency	Total District Wide Proficiency		
May,2000 Results	95%	75%		
May, 2001 Results	90%	84%		
May, 2002 Results	92%	82%		

#### Weld County School District RE #8:

"We found that 30% of our CPP students made at least two years linguistic growth in a nine month period when assessed with the Peabody Picture Vocabulary test and 73% of our CPP students made at least one years growth in that same time period."

#### **Boulder Valley Schools:**

On the third grade reading CSAP, 65% of CPP graduates scored proficient or advanced. Only 49% of the students who are eligible for free lunch scored proficient or advanced on the same test.

#### **Cost Benefits of Higher Scores on Achievement Tests**

The reported results on increased school readiness and higher performance on third grade assessments can also result in significant cost benefits.

To estimate what those benefits might be the chart below illustrates the investment and possible cost savings to a variety of sized school districts if approximately 15% of the CPP-funded preschool children or 1,354 children no longer required the additional educational support provided to at-risk children during their school career. (Please note: Fifteen percent is a very conservative estimate; most school districts are reporting much higher success rates.)

#### Projected Cost Savings if 15% of the CPP Funded Population is No Longer At-Risk in Elementary Grades

	Initial Investment (Funding for one CPP Child within a School District this Size5 FTE)	Estimated Additional Cost to School District per Child At-Risk	15% of Average CPP Allo- cation in these School Districts	Cost savings in Kindergar- ten Year *	Cost Savings in K-1 Years	Cost Sav- ings in K-2 Years *	Cost Sav- ings K-3 Years *	Cost Savings K-4 Years*	Cost Savings K-5 Years *
Very small school dis- tricts (<200 students)	\$5,315	\$4,190	25	\$104,750	\$209,500	\$314,250	\$419,000	\$523,750	\$628,500
Small school districts (200-800 students)	\$3,628	\$2,999	109	\$326,891	\$653,782	\$980,673	\$1,307,564	\$1,634,455	\$1,961,346
Moderate school districts (801-3,000 students)	\$3,016	\$2,854	235	\$670,690	\$1,341,380	\$2,012,070	\$2,682,760	\$3,353,450	\$4,024,140
Large school districts (3,001-12,500 students)	\$2,884	\$2,501	265	\$662,765	\$1,325,530	\$1,988,295	\$2,651,060	\$3,313,825	\$3,976,590
Very large school dis- tricts (>12,500 students)	\$2,897	\$3,880	720	\$2,793,600	\$5,587,200	\$8,380,800	\$11,174,400	\$13,968,000	\$16,761,600
Total			1354	\$4,558,696	\$9,117,392	\$13,676,088	\$18,234,784	\$22,793,480	\$27,352,176

Note: Yearly costs are not adjusted for inflation

Source: Colorado School Finance Project, Calculation of the Cost of an Adequate Education in Colorado Using the Professional Judgment and the Successful School District Approaches, January 2003. (Calculations for <u>additional</u> spending for at-risk students are based on full-day kindergarten being provided by school districts in base spending. Estimates of additional spending for at-risk children include cost of supplies and materials, assessments, school level personnel salaries and benefits and other expenditures.)



In kindergarten I
would like to learn ...

"how to drive."

I already know a lot about ...

"reading."

When I grow up I want to ...

"be a fireman."

#### Final Thoughts on the Cost Benefits of the Colorado Preschool Program

It is important to point out that these estimated cost benefits for reduced special education placements and higher scores on achievement tests, are just two possible measures of cost benefits in attending an early childhood program. They were purposefully calculated conservatively. There are additional cost benefits that have been identified consistently across the national research that have yet to be measured in CPP, i.e. reduced grade retention, increased graduation rates, higher employment rates, fewer welfare recipients etc. All of these benefits are cumulative.

This data indicates that the Colorado Preschool Program can help confirm the findings of those carefully controlled scientific studies: high-quality preschool education for at-risk children is a good investment.

#### **Benefits to Families**

Programs that are able to engage parents in their child's education can strengthen parents' ability to support their children and reinforce the learning that occurs in the classroom. This is why CPP requires programs to have a written plan for parent involvement, and parents are asked to enter into an agreement with the program that specifies what this involvement looks like.

Preschool is a vital experience for children at-risk who don't have access to the same learning opportunities as other children. It's a great way to get parents involved in the education process early on. It gives parents the tools to help their children become successful.

Principal, Pueblo #60 School District

This year each CPP program surveyed families and asked the same questions. The survey responses are a strong indication of the effectiveness of CPP:

- 99% of families strongly agree or agree that they believe their child has benefited as a result of being in CPP
- 99% of families strongly agree or agree that they are comfortable participating in their child's education.

"We can't thank everyone enough for CPP. We can't afford to send our daughter to preschool on our own. We're the same as all the other parents who want to give their children the best they can."

Poudre School District Parent

"The programs has started my child out on the right foot for school, she loves school and is eager to learn!"

Walsh Parent

"El Programa Pre-Escolar me parece que es muy educativo e intersante ya que es aqui donde los ninos empiezan a desarrollarse socialmente y educativamenta. Translated: The preschool program impresses me because it is very educational and interesting. It is here that the children begin their social and education development.."

Adams 14 Parent

"I cannot begin to tell you how grateful I am to have my child in this program. Not only does my child love the school, but she has grown so much socially, mentally and physically from this program."

Silverton Parent

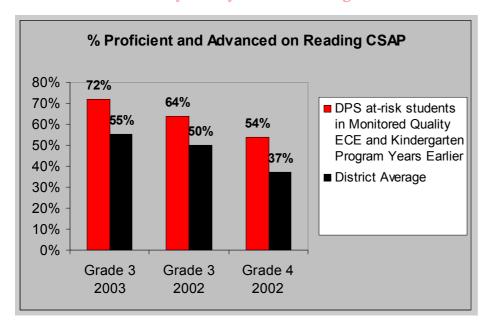
"This has been one of the best things that has helped me and my child to learn to get prepared for kindergarten."

Fountain Parent

#### Colorado Preschool Program Funded Full-Day Kindergarten

The Colorado Preschool Program is authorized to serve 1,000 children in full-day kindergarten. Strong academic progress is being reported in this component of CPP as well.

#### Piton Foundation Study: Early Education Program Boosts Future Achievement



In the November, 2003 issue of the Term Paper, which is published by the Piton Foundation, it was reported that the data strongly suggests that high-quality prekindergarten followed by high-quality kindergarten offsets the negative effects of poverty on school performance more effectively than either pre-kindergarten or kindergarten alone. "There are many explicit indications that Denver students who participate in a quality early education program are doing better (than their peers) despite the fact that they tested low at the beginning," said Catherine Felknor, the statistician who conducted that data analysis for The Piton Foundation.

In kindergarten I would like to learn ...

"many things in English."

I already know a lot about ...

"colors and numbers,"

When I grow up I want to ...

"be a doctor."

CPP has allowed us additional materials and a full-time aide that have significantly improved the value of the kindergarten program as a whole. If we had a half-day program, I have no doubt that the difference would be significant.

Superintendent of Edison Schools

The percentage of full-day CPP kindergarten students placed on ILPs in the first grade is 34%, compared to the number of half-day kindergarten students, which is 54%.

Colorado Springs #11

Children in the full-day kindergarten program have made remarkable progress in their academic and social skills. Each students' progress was documented quarterly. Each student made more than annual yearly progress. In comparison with the half-day kindergarten program we are seeing that students who require language stimulation profit from being in school all day every day.

Summit School District

Kindergarten teachers reported that mastering recognition of uppercase and lowercase letters provides a good measure of progress. By the end of kindergarten, 100% of children enrolled in full day classes had achieved mastery, while only 50% of children in half day classes achieved mastery.

Lamar Public Schools

Marie Clay assessments are given in the fall and spring. Results indicate that students are making significant gains in letter/word identification, concepts of print and writing vocabulary.

Keenesburg RE-3]





In kindergarten I would like to learn ...
"colors in English."

I sometimes wonder ...
"about English."

One more thing you should know about me is ...
"I love my mother, father and grandmother"



#### **ACKNOWLEDGEMENTS**

The Colorado Preschool Program would like to acknowledge and thank the children in CPP funded classrooms who were pictured in this publication and shared a little information about their lives and goals.

We would also like to thank the Piton Foundation for allowing us to share data from their latest publication of the Term Paper. (www.PITON.ORG)

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